

REMARKS

Applicant respectfully thanks the Examiner for the consideration provided to this application, and respectfully requests reconsideration of this application.

Each of claims 1, 4, 13, 15, 19, and 20 has been amended for at least one reason unrelated to patentability, including at least one of: to explicitly present one or more elements, limitations, phrases, terms and/or words implicit in the claim as originally written when viewed in light of the specification, thereby not narrowing the scope of the claim; to detect infringement more easily; to enlarge the scope of infringement; to cover different kinds of infringement (direct, indirect, contributory, induced, and/or importation, etc.); to expedite the issuance of a claim of particular current licensing interest; to target the claim to a party currently interested in licensing certain embodiments; to enlarge the royalty base of the claim; to cover a particular product or person in the marketplace; and/or to target the claim to a particular industry.

Support for the amendments to each of claims 1, 19, and 20 can be found in the application as originally submitted at least at page 7, lines 1-2 and page 10, line 20 – page 11, line 1. Support for the amendments to claim 4 can be found in the application as originally submitted at least at page 9, line 15 – page 10, line 2. Support for the amendments to claim 15 can be found in the application as originally submitted at least at page 11, lines 10-13. It is respectfully submitted that no new matter has been added.

Claims 1-20 are now pending in this application. Each of claims 1, 19, and 20 is in independent form.

I. The Obviousness Rejections

Each of claims 1-20 was rejected under 35 U.S.C. 103(a) as being obvious, and thus unpatentable, over various combinations of U.S. Patent 01/17219 (“Hjartarson”), U.S. Patent 6,292,840 (“Blomfield-Brown”), U.S. Patent 2004/0032860 (“Mundra”), U.S. Patent 2005/0015259 (“Thumpudi”), and/or U.S. Patent 2002/0038158 (“Hashimoto”). Each of these rejections is respectfully traversed.

A. Legal Standards

1. Overview of *Prima Facie* Criteria for an Obviousness Rejection

The Patent Act, namely, 35 U.S.C. 103, forbids issuance of a patent when “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.”

Relatively recently, in *KSR International Co. v. Teleflex, Inc.*, 550 U.S. ___, 127 S. Ct. 1727, 2007 U.S. LEXIS 4745 (2007), the Supreme Court interpreted this law while highlighting the typical invention process. “**Inventions** usually rely upon building blocks long since uncovered, and claimed discoveries **almost necessarily will be combinations** of what, in some sense, is already known” (emphasis added). Yet, to properly apply §103, the Court recognized the need to filter, via obviousness analyses, true inventions from mere ordinary technological advances. “Granting patent protection to **advances that would occur in the ordinary course** without real innovation retards progress and may, in the case of patents combining previously known elements, deprive prior inventions of their value or utility” (emphasis added).

In *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), the Supreme Court established factors regarding the factual inquiry required to establish obviousness. The factors include:

1. determining the scope and contents of the prior art;
2. ascertaining differences between the prior art and the claims at issue;
3. resolving the level of ordinary skill in the pertinent art; and
4. considering objective evidence indicating obviousness or nonobviousness.

Regarding proposed combinations of prior art, *KSR* clarified that the “[t]he question is not whether the combination was obvious to the patentee but whether the combination was obvious to a person with ordinary skill in the art”. Thus, in determining obviousness, both *KSR* and *Graham* warned against a “temptation to read into the prior art the teachings of the invention in issue” and instruct to ““guard against slipping into the use of hindsight””.

KSR further warned that “a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art”.

To heed these warnings, *KSR* explained the “import[ance]” of “identify[ing] a reason

that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does" (emphasis added). That is, "rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some **articulated reasoning** with some rational underpinning to support the legal conclusion of obviousness" (*quoting In re Kahn*, 441 F. 3d 977, 988 (Fed. Cir. 2006) (emphasis added). Thus, "[t]o facilitate review, this analysis should be made explicit".

Explaining the need for "a reason that would have prompted a person of ordinary skill", *KSR* further taught that "if a **technique** has been used to **improve** one device, and a person of ordinary skill in the art **would recognize** that it would improve similar devices in the same **way**, using the technique is obvious unless its actual application is beyond his or her skill" (emphasis added). Further exploring this mandate, the Federal Circuit has recently recognized that "knowledge of a problem and motivation to solve it are entirely different from motivation to combine particular references". *Innogenetics v. Abbott Laboratories* (Fed. Cir. 2007-1145) (8 January 2008).

Thus, according to the Supreme Court, a proper obviousness rejection must "identify a **reason that would have prompted** a person of ordinary skill in the relevant field to **combine** the elements in the way the claimed new invention does" and must present substantial evidence that one of ordinary skill **WOULD** recognize that alleged reason for making the particular claimed combination. It follows that if the alleged reason for making the particular combination of features is not evidenced to be art-recognized, then that reason **MUST BE** based on hindsight.

In addition to establishing a proper reason to combine, a proper obviousness rejection must clearly identify proposed reference(s) that:

1. are pertinent;
2. provide a reasonable expectation of success; and
3. teach... all the claim limitations

See MPEP 2143; MPEP 2143.03, *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); and additional citations *infra*.

Consistent with other patentability rejections, to establish a *prima facie* case of obviousness, substantial evidence must be provided that fulfills the mandates of the applicable law. The "Patent Office has the initial duty of supplying the factual basis for its rejection." *In re*

Warner, 379 F.2d 1011, 154 USPQ 173, 178 (CCPA 1967), *cert. denied*, 389 U.S. 1057, *reh 'g denied*, 390 U.S. 1000 (1968). “It may not... resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis”. *Id.*

It is legal error to “substitute[] supposed *per se* rules for the particularized inquiry required by section 103. It necessarily produces erroneous results.” *See, In re Ochiai*, 71 F.3d 1565, 1571, 37 USPQ2d 1127, 1132-33 (Fed. Cir. 1998); *In re Wright*, 343 F.2d 761, 769-770, 145 USPQ 182, 190 (CCPA 1965).

“Once the examiner... carries the burden of making out a *prima facie* case of unpatentability, ‘the burden of coming forward with evidence or argument shifts to the applicant.’” *In re Alton*, 76 F.3d 1168, 37 USPQ2d 1578 (Fed. Cir. 1996) (*quoting In re Oetiker*, 977 F.2d at 1445, 24 USPQ2d at 1444).

2. All Words in a Claim Must Be Considered

“To establish *prima facie* obviousness..., ‘[a]ll words in a claim must be considered’”. MPEP 2143.03, *quoting In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970); *see also, In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974); *In re Wilder*, 429 F.2d 447, 166 USPQ 545, 548 (CCPA 1970); *In re Angstadt*, 537 F.2d 498, 190 USPQ 214, 217 (CCPA 1976); *In re Geerdes*, 491 F.2d 1260, 180 USPQ 789, 791 (CCPA 1974).

3. Unfounded Assertions of Knowledge

Deficiencies of the cited references can not be remedied by general conclusions about what is basic knowledge or common sense to one of ordinary skill in the art. *In re Zurko*, 258 F.3d 1379, 1385-86 (Fed. Cir. 2001). An assessment of basic knowledge and common sense that is not based on any evidence in the record lacks substantial evidence support. *Id.* That is, such unfounded assertions are not permissible substitutes for evidence. *See, In re Lee*, 277 F.3d 1338, 1435, 61 USPQ2d 1430, 1435 (Fed. Cir. 2002).

4. Determination of the Level of Skill

Consistent with Graham, “the level of ordinary skill in the art is a factual question that must be resolved and considered.” *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 718, 21

USPQ2d 1053, 1057 (Fed. Cir. 1991). “The importance of resolving the level of ordinary skill in the art lies in the necessity of maintaining objectivity in the obviousness inquiry.” *Id.* Thus, the “examiner must ascertain what would have been obvious to one of ordinary skill in the art at the time the invention was made, and ‘not to the inventor, a judge, a layman, those skilled in remote arts, or to geniuses in the art at hand’.” MPEP 2141.03, quoting *Environmental Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 218 USPQ 865 (Fed. Cir. 1983), cert. denied, 464 U.S. 1043 (1984).

B. Analysis

1. All Claims

a. Lack of Required Factual Evidence of Obviousness

Applicant respectfully notes that the present Office Action fails to evidence the scope and contents of the prior art as required under *Graham*. The present Office Action fails to even identify what “the pertinent art” is. Moreover, the present Office Action fails to evidence the level of ordinary skill in the pertinent art.

Applicant respectfully traverses the failure of the present Office Action to comply with the requirements of *Graham* and thereby, to provide a *prima facie* rejection under 35 U.S.C. 103.

b. Lack of Evidence of a Reason to Combine References

The present Office Action fails to provide evidence of obviousness as required under KSR. Regarding the proffered combinations of the applied portions of the relied-upon references, no evidence is provided whatsoever regarding why one having ordinary skill in the art would combine the applied portions of the relied-upon references, that are used in rejecting each of claims 1-20, in such a manner so as to arrive at the claimed subject matter of each of claims 1-20. Regarding the proffered combinations of the applied portions of the relied-upon references, the present Office Action merely makes a series of unsupported assertions:

- i. Regarding claim 1, at Page 3, “it would have been obvious to the person of ordinary skill in the art at the time of the invention to implement the method of negotiating codecs as taught by Blomfield-brown into the telecommunication system of Hjartarson. The motivation for combining

the method of negotiating codecs as necessitated by the system and the telecommunication system of Hjartarson being that it will provide a high quality of service, improve the compression/decompression format and reduce latency.”

- ii. Regarding claim 1, at Pages 3-4, “it would have been obvious to a person of ordinary skill in the art at the time of the invention to implement the method of automatically changing the codecs depending on the network capabilities, as taught by Mundra, into the method of Hjartarson in view of Blomfield for the purpose of improving the QOS of telecommunication.”
- iii. Regarding claims 7-13, at Page 4, “it would have been obvious to the person of ordinary skill in the art at the time of the invention to implement the method of negotiating codecs as taught by Blomfield-brown into the telecommunication system of Hjartarson. The motivation for combining the method of negotiating codecs as necessitated by the system and the telecommunication system of Hjartarson being that it will provide a high quality of service, improve the compression/decompression format and reduce latency.”
- iv. Regarding claims 7-13, at Pages 4-5, “it would have been obvious to a person of ordinary skill in the art at the time of the invention to implement the method of automatically changing the codecs depending on the network capabilities, as taught by Mundra, into the method of Hjartarson in view of Blomfield for the purpose of improving the QOS of telecommunication.”
- v. Regarding claims 14-18, at Page 5, “it would have been obvious to the person of ordinary skill in the art at the time of the invention to implement the system of negotiating codecs format as taught by Blomfield-brown into the telecommunication system of Hjartarson. The motivation for implementing the method of negotiating codec formats between the SLIC and CPE, as taught by Blomfield-brown, into the telecommunication

system of Hjartarson being that it will provide a high quality of service, improve the compression/decompression format, and reduce the latency.”

- vi. Regarding claims 2-3, at Page 6, “it would have been obvious to the person of ordinary skill in the art at the time of the invention to modify the codec instructions of Hjartarson’s method to be compatible with the ITU G or G.722. The motivation for modifying the Hjartarson’s method to be compatible with the ITU G or G.722 being that it will offer lower bit-rate compressions, as well as the ability to quickly adapt to varying compressions as the network topography mutates. Moreover, the modification will offer a significant improvement in speech quality over popular codecs.”
- vii. Regarding claim 4, at Page 6, “it would have obvious to the person of ordinary skill in the art at the time the invention was made to modify the codec of Hjartarson’s method to be compatible with Dolby Digital AC-3. The motivation for making the codec of Hjartarson’s method compatible with Dolby Digital AC-3 being that it will compress audio signals to produce a Dolby Digital sound and enhance the quality of the communication.”
- viii. Regarding claim 5, at Page 7, “it would have been obvious to the person of ordinary skill in the art at the time the invention was made to modify the codec disclosed in Hjartarson’s method to be compatible with the DTS codec as taught by Hashimoto. The motivation for making the codec of Hjartarson’s method compatible with DTS codec being that it is a representation of compression systems of audio data and linear PCM; moreover, it will provide a high quality audio and enhance telecommunication services.”

The present Office Action provides no evidence that the claimed subject matter **would have occurred in the ordinary course** without real innovation or that the combination would have been obvious to a person with ordinary skill in the art. The present Office Action fails to evidence an art-recognized reason that **would have prompted** a person of ordinary skill in the

relevant field to combine the elements **in the way the claimed new invention does**. Instead, the present Office Action merely provides impermissible conclusory statements. Because the present Office Action fails to present substantial evidence that one of ordinary skill **would** recognize that alleged reason for making the particular claimed combination and does not evidence the reason to be art-recognized, the stated reason **must be** based on hindsight. Thus, the present Office Action fails to provide a rational underpinning to support the legal conclusion of obviousness. None of the rejections of each of claims 1-20 can be sustained based upon the mere conclusory statements of the present Office Action.

2. Claim 1

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 1 states, *inter alia*, yet no substantial evidence has been presented that the applied portions of Blomfield-Brown and/or the applied portions of Mundra teach, “the digital signal processor adapted to switch automatically **between one or more high quality audio codecs and a POTS codec** depending on: capabilities of customer premises equipment at either end of a call comprising the analog signal” and “capabilities of a network via which the plurality of digital samples are transmitted”. The applied portion of Blomfield-Brown and/or the applied portions of Mundra **are each silent regarding any “POTS codec” whatsoever**. Thus, no substantial evidence is of record that the applied portions of Blomfield-Brown and/or the applied portions of Mundra teach, “the digital signal processor adapted to switch automatically **between one or more high quality audio codecs and a POTS codec** depending on: capabilities of customer premises equipment at either end of a call comprising the analog signal; and capabilities of a network via which the plurality of digital samples are transmitted”.

No substantial evidence has been presented that the applied portions of Hjartarson cure these deficiencies of the applied portions of Blomfield-Brown and/or the applied portions of Mundra.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the

Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as **attempted to be modified and/or combined**, expressly or inherently teach **every** limitation of the independent claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness. Consequently, for at least the reasons mentioned above, reconsideration and withdrawal of these rejections is respectfully requested.

Moreover, the rejection of claim 1 is traversed as moot in view of the present amendments to claim 1. Specifically, claim 1 states, *inter alia*, yet no substantial evidence has been presented that the applied portions of the relied-upon references teach, “at least one piece of customer premises equipment adapted, via an exchange of network signals, to verify that a subscriber is using intelligent customer premises equipment, intelligent customer premises equipment capable of reproducing high fidelity voice signals having a frequency range that is wider than 3.1 kilohertz”.

For at least these reasons, reconsideration and withdrawal of the rejection of claim 1 is respectfully requested. Also, reconsideration and withdrawal of each rejection of each of claims 2-18, each of which ultimately depends from claim 1, is also respectfully requested.

3. Claim 4

The rejection of claim 4 is traversed as moot in view of the present amendments to claim 4. Specifically, claim 4 states, *inter alia*, yet no substantial evidence has been presented that the applied portions of the relied-upon references teach, “the subscriber interface line card is adapted to automatically substitute a Dolby Digital AC-3 codec for a G.722 codec upon learning that far-end customer premises equipment can handle Dolby Digital AC-3”.

For at least these reasons, reconsideration and withdrawal of the rejection of claim 4 is respectfully requested.

4. Claim 15

The rejection of claim 15 is traversed as moot in view of the present amendments to claim 15. Specifically, claim 15 states, *inter alia*, yet no substantial evidence has been presented

that the applied portions of the relied-upon references teach, “the far-end CPE adapted to perform each function performed by the subscriber interface line card”.

For at least these reasons, reconsideration and withdrawal of the rejection of claim 15 is respectfully requested.

5. Claim 19

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 19 states, *inter alia*, yet no substantial evidence has been presented that the applied portions of Blomfield-Brown and/or the applied portions of Mundra teach, “encoding, via high-quality audio codec instructions running on a digital signal processor installed on the subscriber interface line card, the plurality of digital samples, the digital signal processor adapted to switch automatically **between one or more high quality audio codecs and a POTS codec** depending on: capabilities of customer premises equipment at either end of a call comprising the analog signal” and “capabilities of a network via which the plurality of digital samples are transmitted”. The applied portion of Blomfield-Brown and/or the applied portions of Mundra **are each silent regarding any “POTS codec” whatsoever**. Thus, no substantial evidence is of record that the applied portions of Blomfield-Brown and/or the applied portions of Mundra teach, “encoding, via high-quality audio codec instructions running on a digital signal processor installed on the subscriber interface line card, the plurality of digital samples, the digital signal processor adapted to switch automatically **between one or more high quality audio codecs and a POTS codec** depending on: capabilities of customer premises equipment at either end of a call comprising the analog signal” and “capabilities of a network via which the plurality of digital samples are transmitted”.

No substantial evidence has been presented that the applied portions of Hjartarson cure these deficiencies of the applied portions of Blomfield-Brown and/or the applied portions of Mundra.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the

Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as **attempted to be modified and/or combined**, expressly or inherently teach **every** limitation of the independent claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness. Consequently, for at least the reasons mentioned above, reconsideration and withdrawal of these rejections is respectfully requested.

Moreover, the rejection of claim 19 is traversed as moot in view of the present amendments to claim 19. Specifically, claim 19 states, *inter alia*, yet no substantial evidence has been presented that the applied portions of the relied-upon references teach, “at least one piece of customer premises equipment adapted, via an exchange of network signals, to verify that a subscriber is using intelligent customer premises equipment, intelligent customer premises equipment capable of reproducing high fidelity voice signals having a frequency range that is wider than 3.1 kilohertz”.

For at least these reasons, reconsideration and withdrawal of the rejection of claim 19 is respectfully requested.

6. Claim 20

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 20 states, *inter alia*, yet no substantial evidence has been presented that the applied portions of Blomfield-Brown and/or the applied portions of Mundra teach, a “high-quality audio codec installed on the subscriber interface line card, adapted to run on a digital signal processor coupled to the POTS subscriber interface line card, and adapted to encode the plurality of digital samples, the digital signal processor adapted to switch automatically **between one or more high quality audio codecs and a POTS codec** depending on: capabilities of customer premises equipment at either end of a call comprising the analog signal” and “capabilities of a network via which the plurality of digital samples are transmitted”. The applied portion of Blomfield-Brown and/or the applied portions of Mundra are **each silent regarding any “POTS codec” whatsoever**. Thus, no substantial evidence is of record that the applied portions of Blomfield-Brown and/or the applied portions of Mundra teach, a “high-quality audio codec installed on the

subscriber interface line card, adapted to run on a digital signal processor coupled to the POTS subscriber interface line card, and adapted to encode the plurality of digital samples, the digital signal processor adapted to switch automatically **between one or more high quality audio codecs and a POTS codec** depending on: capabilities of customer premises equipment at either end of a call comprising the analog signal" and "capabilities of a network via which the plurality of digital samples are transmitted".

No substantial evidence has been presented that the applied portions of Hjartarson cure these deficiencies of the applied portions of Blomfield-Brown and/or the applied portions of Mundra.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, **as attempted to be modified and/or combined**, expressly or inherently teach **every** limitation of the independent claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness. Consequently, for at least the reasons mentioned above, reconsideration and withdrawal of these rejections is respectfully requested.

Moreover, the rejection of claim 20 is traversed as moot in view of the present amendments to claim 20. Specifically, claim 20 states, *inter alia*, yet no substantial evidence has been presented that the applied portions of the relied-upon references teach, "at least one piece of customer premises equipment adapted, via an exchange of network signals, to verify that a subscriber is using intelligent customer premises equipment, intelligent customer premises equipment capable of reproducing high fidelity voice signals having a frequency range that is wider than 3.1 kilohertz".

For at least these reasons, reconsideration and withdrawal of the rejection of claim 20 is respectfully requested.

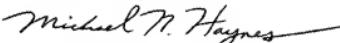
CONCLUSION

It is respectfully submitted that the application is in clear condition for allowance. Reconsideration, withdrawal of all grounds of rejection, and issuance of a Notice of Allowance are earnestly solicited.

The Office is hereby authorized to charge any additional fees or credit any overpayments under 37 C.F.R. 1.16 or 1.17 to Deposit Account 50-2504. The Examiner is invited to contact the undersigned at 434-972-9988 to discuss any matter regarding this application.

Respectfully submitted,

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